BOBBY JINDAL
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SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

Certified Mail No.

Agency Interest (AI) No. 288
Activity No. PER20020001

Mr. Kelly B. Serio
Vice President
Formosa Plastics Corp
PO Box 271
Baton Rouge, LA 70821-0271

RE: Emission Reduction Credits, Offsets for modernization to the polyvinyl chloride (PVC) plant, Formosa Plastics Corp Louisiana, East Baton Rouge Parish, Louisiana

Dear Mr. Serio:

By application dated July 16, 2007, Formosa Plastics Corp notified the Department that they propose to modernize the PVC Unit, (Activity Number PER20060005). The net emissions increase of volatile organic compounds (VOCs) from the project will be above the Nonattainment New Source Review (NNSR) threshold and will require 75.49 tons of VOC offsets.

Analysis of Validity

I. LAC 33:III.607.C.1:

If the design value for the nonattainment area is above the national ambient air quality standard (NAAQS) for ozone, the department shall compare the current total point-source emissions inventory for the modeled parishes[1] to the base line inventory[2] [§607.C.1]. Because East Baton Rouge, West Baton Rouge, Ascension, Iberville, and Ascension Parishes remain classified as marginal ozone nonattainment areas with respect to the 8-hour ozone NAAQS, this comparison is required and is detailed as follows.

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[1] *Current Total Point-Source Emissions Inventory*—the aggregate point-source emissions inventory for either NO_X or VOC from the nine modeled parishes compiled from Emission Inventory System (EIS) records and updated annually in accordance with LAC 33:III.919, plus any banked ERC and pending ERC applications originally included in the base case inventory that have not expired.

[2] *Base Line Inventory*—the aggregate point-source emissions inventory for either NO_X or VOC from the nine modeled parishes associated with the 2005 Attainment Plan and Transport Demonstration SIP dated December 2001, which accounts for emission reductions modeled to demonstrate attainment of the 1-hour national ambient air quality standard (NAAQS) for ozone. Separate inventories have been established for NO_X and VOC.

	VOC	NO_X
Aggregate point-source emissions inventory from the nine modeled parishes:[3]	14,184.92 TPY 38.84 TPD	42,103.30 TPY 115.27 TPD
Banked ERC and pending ERC applications originally included in the base case inventory that have not expired:[4]	0.0 TPD	0.0 TPD
Current total point-source emissions inventory:	38.84 TPD	115.27 TPD
Base line inventory:	71.3 TPD	164.9 TPD

The current 2007 total point-source emissions inventory is 38.84 tons per day (TPD) for VOC and 115.27 TPD for NO_X, whereas the base line inventory is 71.3 TPD for VOC and 164.9 TPD for NO_X. Therefore, the current total point-source emissions inventory *is less than* the base line inventory for both VOC and NO_X. Thus, pursuant to LAC 33:III.607.C.4.a.ii, baseline emissions shall be the lower of actual emission or adjusted allowable emissions determined in accordance with LAC 33:III.607.C.3.

II. Per the requirements of LAC 33:III.607.B and C, the credits were reviewed to ensure they are surplus, permanent, quantifiable, and enforceable.

Polyvinyl Chloride (PVC) Plant,
AI No. 288, Permit 1004-V0, issued 10/24/2001

Emission Point	ID 178
Operating Rate (ft^3/min)	320,000
Hours/day:	24
Days/week:	7
Allowables Before (Tons/year)	97.79
Adjusted Allowables (Tons/year)	97.79
Actual Emissions (Tons/year)	81.50
Baseline Emissions (Tons/year)	81.50
Allowables After (Tons/year)	0
Creditable Change:	81.50
Amount Offset:	75.49
Balance:	6.01

[3] Aggregate 2007 point-source emissions from the nine modeled parishes, derived from EIS records (LAC 33:III.919). In order to be conservative, emissions from all portable sources were attributed to the nine parishes modeled.

[4] As of December 31, 2007, all banked ERC and pending ERC applications originally included in the base case inventory have expired. ERCs have a life span of 10 years from the date of the actual emission reduction to the atmosphere and all emissions reductions included in the inventory occurred between January 1, 1990 and December 31, 1997.

III. Summarize VOC Credits:

	VOC Balance Before	VOC Offset	VOC Balance After
Total (tons VOC)	81.50	75.49	6.01

Attached is Formosa's ERC Certificate. If you have any questions, please call Keith Jordan at (225) 219-3181.

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

_____
Date

CSN:KAJ

DEQ
LOUISIANA

Louisiana Department of Environmental Quality
Emission Reduction Credit Certificate

Item Number: 288PER20020001

Owner: Formosa Plastics Corporation

Phone number: (225) 356-3341

Company Address: PO Box 271
Baton Rouge, Louisiana 70721-0271

EMISSION REDUCTION INFORMATION

Physical Location: Gulf States Road, Baton Rouge, East Baton Rouge Parish

Method of ERC creation: Replacement of methanol-based chemicals with water-based chemicals in the PVC production process. 75.49 tons of VOCs used to offset PVC modernization project, (Activity Number PER20060005).

Pollutant: VOC (tons)

Amount Generated	81.50
Amount Offset for Project	75.49
Balance	6.01

Date of emission reduction: December 31, 2001

Assistant Secretary

Date

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.

Agency Interest No. 1413

Mr. Ronald K. Dodge
Site Manager
UOP, LLC, Baton Rouge Plant
1200 Airline Highway
Baton Rouge, Louisiana 70805

RE: Notification of impact of modeling results conducted by Formosa Plastics Corporation

Dear Mr. Dodge:

On September 9, 2008, Formosa Plastics Corporation's Baton Rouge facility (FPC-LA) submitted vinyl chloride modeling results to staff of the LDEQ's Engineering Section as part of the review process for finalizing a Prevention of Significant Deterioration Permit and a Part 70 Operating Permit for its Polyvinyl Chloride (PVC) Unit. As a source of vinyl chloride Toxic Air Pollutant (TAP) emissions, an evaluation of compliance with applicable TAP Ambient Air Standards (AAS) is required. The purpose of this letter is to notify UOP of the impact of the vinyl chloride emissions upon their facility and of LDEQ's actions in regards to the results of the modeling.

The conservative modeling analysis was performed using the most recent meteorological data year (2006). The predicted maximum annual average concentration model was over 8 $\mu g/m^3$, which exceeded the AAS standard of 1.19 $\mu g/m^3$. Vinyl chloride modeling results showed that there were receptors with ambient air impacts greater than the AAS. Exceedances of the AAS were noted outside the facility boundaries on adjacent industrial properties, specifically ExxonMobil Refinery and UOP properties. There was no impact to non-industrial public receptors. Since the receptor locations are in areas that are uninhabited or have restricted access (e.g., adjacent industrial properties), long term exposure of vinyl chloride is not expected to impact non-industrial areas.

At the request of LDEQ, modeling was conducted for those receptors that showed an exceedance over the AAS outside FPC-LA facility boundaries in order to establish an 8-hour average concentration. This concentration was compared to the Occupational Health and Safety Administration (OSHA) standard for vinyl chloride listed in 29 CFR 1910.1017. The OSHA standard for vinyl chloride is 1 ppm (2560 $\mu g/m^3$). Modeling results of 8-hour averages indicated a maximum concentration of 146 $\mu g/m^3$ for those receptors and demonstrates compliance with the OSHA standard. The modeling results show that FPC-LA will not pose a significant worker exposure risk.

Based upon the refined modeling and comparative analysis, the LDEQ accepted Formosa's modeling results. Therefore, the permit review of Formosa's PVC Unit by LDEQ's Air Permits Division will continue. If you have any questions or concerns regarding this matter, please contact Ms. Cathy E. Thompson of the Air Permits Division, Petrochemical Section at (225) 219-3075.

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

Date

CSN:cet

Based upon the refined modeling and comparative analysis, the LDEQ accepted Formosa's modeling results. Therefore, the permit review of Formosa's PVC Unit by LDEQ's Air Permits Division will continue. If you have any questions or concerns regarding this matter, please contact Ms. Cathy E. Thompson of the Air Permits Division, Petrochemical Section at (225) 219-3075.

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

17 Nov 2008
Date

CSN:cet

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.

Agency Interest No. 2638

Mr. Stan J. Vanderleeuw
Refinery Manager
ExxonMobil Refining and Supply Company
P.O. Box 551
Baton Rouge, Louisiana 70821

RE: Notification of impact of modeling results conducted by Formosa Plastics Corporation

Dear Mr. Vanderleeuw:

On September 9, 2008, Formosa Plastics Corporation's Baton Rouge facility (FPC-LA) submitted vinyl chloride modeling results to staff of the LDEQ's Engineering Section as part of the review process for finalizing a Prevention of Significant Deterioration Permit and a Part 70 Operating Permit for its Polyvinyl Chloride (PVC) Unit. As a source of vinyl chloride Toxic Air Pollutant (TAP) emissions, an evaluation of compliance with applicable TAP Ambient Air Standards (AAS) is required. The purpose of this letter is to notify ExxonMobil of the impact of the vinyl chloride emissions upon their facility and of LDEQ's actions in regards to the results of the modeling.

The conservative modeling analysis was performed using the most recent meteorological data year (2006). The predicted maximum annual average concentration model was over 8 $\mu g/m^3$, which exceeded the AAS standard of 1.19 $\mu g/m^3$. Vinyl chloride modeling results showed that there were receptors with ambient air impacts greater than the AAS. Exceedances of the AAS were noted outside the facility boundaries on adjacent industrial properties, specifically ExxonMobil Refinery and UOP properties. There was no impact to non-industrial public receptors. Since the receptor locations are in areas that are uninhabited or have restricted access (e.g., adjacent industrial properties), long term exposure of vinyl chloride is not expected to impact non-industrial areas.

At the request of LDEQ, modeling was conducted for those receptors that showed an exceedance over the AAS outside FPC-LA facility boundaries in order to establish an 8-hour average concentration. This concentration was compared to the Occupational Health and Safety Aministration (OSHA) standard for vinyl chloride listed in 29 CFR 1910.1017. The OSHA standard for vinyl chloride is 1 ppm (2560 $\mu g/m^3$). Modeling results of 8-hour averages indicated a maximum concentration of 146 $\mu g/m^3$ for those receptors and demonstrates compliance with the OSHA standard. The modeling results show that FPC-LA's Baton Rouge facility will not pose a significant worker exposure risk.

Based upon the refined modeling and comparative analysis, the LDEQ accepted Formosa's modeling results. Therefore, the permit review of Formosa's PVC Unit by LDEQ's Air Permits Division will continue. If you have any questions or concerns regarding this matter, please contact Ms. Cathy E. Thompson of the Air Permits Division, Petrochemical Section at (225) 219-3075.

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

Date

CSN:cet

original to I.O.A.
copy to

COPY

Formosa Plastics

LDEQ RECEIPT

2007 JUL 16 PM 3 38

Formosa Plastics Corporation, Louisiana
P.O. Box 271
Baton Rouge, LA 70821-0271
Telephone: (225)-356-3341
Fax: (225)-356-8611

RECEIVED
JUL 16 2007

July 16, 2007

Modeling PSD

HAND DELIVERED

Ms. Yvette McGehee
Engineering Support, Office of Environmental Assessment
Louisiana Department of Environmental Quality
P.O. Box 4313
Baton Rouge, LA 70821-4313

Re: Response to June 4, 2007 Additional Information Request for PVC Unit Part 70 Renewal Application
Proposed Permit No. 1004-V-1
Agency Interest No. 288
Activity No. PER20060005

Dear Ms. McGehee:

Formosa Plastics Corporation, Louisiana (FPC) submits for approval the enclosed Proposed Air Quality Modeling Protocol for the FPC PVC Unit as requested by the Louisiana Department of Environmental Quality (LDEQ) in correspondence to FPC dated June 4, 2007 (attached for reference).

Should you have any questions or require additional information, please do not hesitate to contact Mr. Omer Wolff at (225) 358-8511 or Mr. Brandon Bencaz at (225) 356-8633.

Sincerely,
FORMOSA PLASTICS CORPORATION, LA

7/16/07 for Kelly Serio
Kelly Serio
Vice President/Plant Manager

Enclosure: Proposed Air Quality Modeling Protocol
Attachment: LDEQ Additional Information Request dated 6/4/07

ISO 9001:2000 FM 31430 ISO 14001 EMS 38149